### ASBESTOS SURVEY & ASSESSMENT REPORT GREDE FOUNDRIES, INC. REEDSBURG FOUNDRY 700 ASH STREET REEDSBURG, WI 53959

Nova Client No.: DAVIS005 Project No.: C00-0066

April 20, 2000

### Prepared For:

Davis & Kuelthau, s.c. 111 E. Kilbourn Avenue Milwaukee, Wisconsin 53202 (414) 225-1487

### Prepared by:

Nova Consulting Group, Inc. 3115 North Wilke Road, Suite A Arlington Heights, IL 60004 (847) 483-9282

### **EXECUTIVE SUMMARY**

Nova Consulting Group, Inc. (Nova) was retained to perform an asbestos survey and assessment for asbestos-containing building materials (ACBM) of the Grede Foundries, Inc. Reedsburg Foundry facility located at 700 Ash Street in Reedsburg, Wisconsin.

The survey and assessment was completed in accordance with the Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), 40 CFR 763. The purpose of this inspection was to identify suspect friable and non-friable ACBM and properly assess the confirmed friable ACBM following the AHERA Hazard Ranking System. Based on the hazard rankings, appropriate response actions have been generated following the EPA Decision Tree. Suspect materials that were inaccessible or would require intrusive or destructive sampling were not sampled as part of this survey.

### Asbestos-Containing Building Materials:

The survey was conducted on March 21-22, 2000 by certified inspectors Darby Nafziger and Jeffrey Menter. Nova collected 42 samples of friable and non-friable ACBM in a random and unbiased manner. The following types of material were analyzed and determined to contain asbestos (includes presumed/assumed positive materials):

Material Identification Number	Material Identification	Material Subcategory	Material Subcategory Description
214	4-8 Felt Pipe Insulation	FP1	6" Wrapped Pipe Insulation
310	12x12 Floor Tile & Mastic	FT1	Tan Mottled
310	12x12 Floor Tile & Mastic	FT2	White Floor Tile
324	Transite Pipe	TR1	Exhaust pipe
324	Transite Siding	TR2	Exterior Siding
406	Roofing Insulation/Fireproofing	RII	Fibrous Roof Insulation Under Decking

AHERA hazard rankings for the friable ACBM listed above are provided in Table 1. The AHERA hazard ranking system has only been applied to friable ACBM.

The following materials do not contain asbestos:

Material Identification Number	Material Identification	Material Subcategory	Material Subcategory Description
101	Spray-On	SO1	Spray-On Soundproofing
222	0-4 Fibrous Pipe Fittings	FF1	Fibrous Fittings On Fiberglass Insulaiton
222	0-4 Fibrous Pipe Fittings	FF2	2" Mudded Fittings On Rest Room Lines
241	Tank Insulation	TI1	Spray-On Tank Insulation
303	2x4 Ceiling Tile	CT1	Off-White Fissured
303	2x4 Ceiling Tile	CT2	White With Fissures
303	2x4 Ceiling Tile	CT3	Off-White With Fissures And Pinholes
305	Sheetrock & Taping Compound	DW1	Drywall/ Taping Compound
306	Plaster	PL1	Wall Plaster
310	12x12 Floor Tile & Mastic	FT3	Grey Mottled

### Conclusions:

A total of approximately 100 linear feet of friable asbestos-containing pipe-insulation and associated pipe-fittings, 4,000 square feet of friable asbestos-containing roof insulation; 1,150 square feet of non-friable asbestos-containing 12" X 12" floor tile and associated mastic; 40 square feet of non-friable transite exhaust pipe; and 800 square feet of non-friable asbestos-containing transite siding were identified during the survey.

The Environmental Protection Agencies (EPA) National Emission Standard for Hazardous Air Pollutants (NESHAP) as well as the Wisconsin Department of Natural Resources (WDNR) requires removal of regulated friable and non-friable damaged ACBM prior to demolition. EPA also requires the removal of regulated friable ACBM and non-friable ACBM that may become friable during renovation.

The Occupational Safety and Health Administration (OSHA) construction and general industry standards also regulate ACBM during removal and maintenance activities. In 1995, OSHA adopted asbestos regulations that, for the first time, may extend to many previously unregulated commercial and industrial buildings. The regulations lower the permissible asbestos exposure level in the workplace. They also make a number of technical changes both in the way various regulated activities are classified and in the practices required when asbestos is used, removed, managed, or disturbed. The biggest change, however, is to afford regulatory protection to a greater number of workers across a variety of environments.

### Recommendations:

Based on the results of this investigation, Nova recommends the following:

- The facility owners should **notify employees**, tenants, contractors, and vendors working in the building of the presence, quantity, and location of identified or assumed ACBM.
  - Approximately 100 linear feet of friable asbestos-containing pipe-insulation and associated pipe-fittings were identified beneath a stairwell adjacent to the main office area. In addition, approximately 4,000 square feet of friable asbestos-containing roof insulation was identified beneath the corrugated roof decking adjacent to a second floor storage room; 1,150 square feet of non-friable asbestos-containing 12" X 12" floor tile and associated mastic was identified in the Plant 5 Maintenance offices and storage areas; approximately 40 square feet of non-friable transite exhaust pipe was identified in the storage room above the main locker room area; and approximately 800 square feet of non-friable asbestos-containing transite siding was identified at the north storage building. The pipe insulation and associated fittings were damaged and in poor condition during the time of the survey and were given an AHERA Hazard Ranking of 2. A Hazard Ranking of 2 is defined as ACBM that is damaged and is located in areas where disruption could be expected due to work being performed in the area and/or dispersed in moving air. The roof insulation/fireproofing was not damaged and in good condition during the time of the survey and was given an AHERA Hazard Ranking of 6. A Hazard Ranking of 6 is defined as friable ACBM that is in good condition, but has potential for damage. Hazard Rankings are not required for non-friable materials (i.e. vinyl floor tile, mastic, transite) and are therefore not provided as part of this report.
- According to the EPA Decision Tree, continue Operations and Maintenance (O&M) and repair
  or remove damaged areas as soon as possible. Short-term corrective action may include
  reducing potential for damage, encapsulating damaged sections and/or restricting access to the
  area.

- All friable ACBM, damaged non-friable ACBM, and all non-friable ACBM, which may become friable during renovation or demolition, should be removed from the affected areas of the building prior to these activities.
- The owners should submit completed Notifications of Intent to Perform Asbestos Abatement or Demolition/Renovation forms to the appropriate regulatory agencies.
- Any areas of the building not inspected during this investigation should be assumed to contain asbestos. Prior to any renovation, demolition, or disturbance of potential ACBM, selective demolition with appropriate controls are recommended until the asbestos content of the potentially impacted materials can be confirmed.
- The owner should maintain an Operations and Maintenance (O&M) Program for ACBM remaining in the facility.

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### **APPENDICES**

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Appendix C: Laboratory Credentials

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### 1.0 INTRODUCTION

The Grede Foundries, Inc. Reedsburg Foundry facility is located at 700 Ash Street in the City of Reedsburg, Wisconsin. The facility was constructed in stages from the 1940s through the 1990s and is comprised of steel frame on concrete slab construction. The approximately 350,000 square foot facility consists of office areas, mechanical spaces, maintenance/tooling areas, storage spaces, shipping and warehousing areas. The remaining areas of the facility consist of manufacturing operations.

The EPA's NESHAP (40 CFR Part 61) requires building owners to inspect for ACBM, specifically in areas of a building where renovation or demolition will be performed. Prior to renovation or demolition of a building, all regulated friable ACBM must be removed from the affected area. In addition, non-friable materials, which are in a damaged condition or are likely to become friable during the process of renovation or demolition also require removal. Non-friable materials, which are in good condition at the time of inspection and most likely will not become friable during demolition may under certain circumstances, remain in place prior to demolition. EPA and OSHA define any building material that contains greater than one-percent asbestos to be an asbestos-containing material.

### 1.1 Project Description

The Grede Foundries, Inc. Reedsburg Foundry facility located at 700 Ash Street in the City of Reedsburg, Wisconsin was inspected by USEPA and state of Wisconsin certified building inspectors (b) (6), (b) (7)(C) and (b) (6), (b) (7)(C) for the presence of asbestos-containing materials. A total of 42 bulk samples were collected and analyzed by Nova's NVLAP accredited laboratory. The survey and assessment were conducted in accordance with EPA's Asbestos Hazard Emergency Response Act (AHERA).

### 1.2 Assessment Methodology

Materials identified as asbestos containing were assessed with respect to their existing condition and the potential for future damage or disturbance. The condition of the materials were assessed relative to the following criteria:

- Existing mechanical damage (percentage and type)
- Water damage
- Accumulation of debris, dust, powder below suspect ACBM
- Friability
- Area usage and expected duration of use
- Accessibility

The potential for future damage and disturbance were evaluated with respect to:

- Potential for worker contact with the ACBM
- Influence of vibration on the materials

Based on these factors each ACBM was assigned a hazard ranking ranging from 1 to 7. Using the EPA Decision Tree a recommended Response Action is applied to each ACBM. The EPA Decision Trees are presented in Appendix C: Figures 1 & 2. The hazard rankings and applicable response actions are listed below:

### **Hazard Ranking**

- 1 Asbestos-containing building materials (ACBM) are present and significant damage has occurred (ACBM loose and subject o dispersal in moving air)
- ACBM is present and damage has occurred. The ACBM is in areas where fiber disruption could be expected due to work being performed in the area and/or dispersed in moving air.
- 3-5 ACBM is present and damage has occurred. There is moderate to low potential for disturbance and entrainment into an airflow is unlikely.
- 6-7 ACBM is present without damage in areas subject to moderate or high activity, or potential for disturbance.

### Response Action

Isolate area and restrict access. Removal of asbestos should be conducted as soon as possible to prevent accidental fiber release. Where applicable, effect repair to the damaged ACBM to alter Response Action.

Continue O&M. Repair or remove damaged areas as soon as possible. Shortterm corrective actions may include:

- a. Reduce potential for disturbance.
- b. Encapsulate damaged sections.
- Restrict access to the area.

Patch and repair the damaged ACBM sections with bridging encapsulant, rewettable cloth, or glove bag removal. Continue O&M. Number indicates priority if all repairs cannot be done immediately.

Continue O&M. Take measures to reduce the potential for disturbance. Number indicates priority for removal.

### 2.0 RESULTS

### 2.1 Asbestos-Containing Material

The following types of material were found to contain asbestos. The area-by-area inventory is presented in Section 5.0 as Table 1: Material Identification Inventory. The laboratory analytical results are presented in Section 5.0 as Table 2: Material Sample Analysis.

Asbestos was identified in the following materials (includes presumed/assumed positive materials):

Material ID Number	Material Identi- fication	Material Subcat- egory	Area	Sum Of Quantity	Unit	Condition	Friability
214	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	Plant Office	100	LF	Non- Damaged	Friable
310	12x12 Floor Tile & Mastic	Tan Mottled	Plant 5 Maintenan ce	250	SF	Non- Damaged	Non- friable
310	12x12 Floor Tile & Mastic	White Floor Tile	Plant 5 Maintenan ce	900	SF	Non- Damaged	Non- friable
324	Transite Pipe	Exhaust Pipe	Storage Room Above Main Locker Room	40	SF	Non- Damaged	Non- friable
324	Transite Siding	Exterior Siding	North Storage Building	800	SF	Non- Damaged	Non- friable
406	Roofing Insulation	Fibrous Roof Insulation Under Decking	Mechanic al Room	4,000	SF	Non- Damaged	Friable

4-8" Felt Pipe Insulation & Associated Fittings: Approximately 100 linear feet of friable asbestos-containing material was identified beneath a stairwell adjacent to the main office area. This material was damaged and appeared to be in poor condition during the time of the survey.

12" X 12" Tan Mottled Floor Tile & Associated Mastic: Approximately 750 square feet of non-friable asbestos-containing material was identified in the Plant 5 Maintenance upper level office and training rooms. This material was not damaged and appeared to be in generally good condition during the time of the survey.

12" X 12" White Floor Tile & Associated Mastic: Approximately 900 square feet of non-friable asbestos-containing material was identified in the plant offices, stairwell, and tool storage areas. This material was not damaged and appeared to be in generally good condition during the time of the survey.

**Roofing Insulation:** Approximately 4,000 square feet of friable asbestos-containing material was identified beneath the corrugate metal decking adjacent to a second floor storage room. This material was not damaged and appeared to be in generally good condition during the time of the survey.

**Transite Exhaust Pipe:** Approximately 40 square feet of non-friable asbestos-containing material was identified in a second floor storage area. This material was not damaged and appeared to be in generally good condition during the time of the survey.

**Transite Siding:** Approximately 800 square feet of non-friable asbestos-containing material was identified at the north storage building. This material was not damaged and appeared to be in generally good condition during the time of the survey.

The following materials were analyzed and do not contain asbestos:

Material Identification Number	Material Identification	Material Subcategory	Material Subcategory Description	Sum Of Quantity	Unit
101	Spray-On	SO1	Spray-On Soundproofing	1,700	SF
222	0-4 Fibrous Pipe Fittings	FF1	Fibrous Fittings On Fiberglass Insulaiton	90	EA
222	0-4 Fibrous Pipe Fittings	FF2	2" Mudded Fittings On Rest Room Lines	180	EA

241	Tank Insulation	TII	Spray-On Tank Insulation	300	SF
303	2x4 Ceiling Tile	CT1	Off-White Fissured	750	SF
303	2x4 Ceiling Tile	CT2	White With Fissures	2,700	SF
303	2x4 Ceiling Tile	CT3	Off-White With Fissures And Pinholes	3,000	SF
305	Sheetrock & Taping Compound	DW1	Drywall/ Taping Compound	60,000	SF
306	Plaster	PL1	Wall Plaster	300	SF
310	12x12 Floor Tile & Mastic	FT3	Grey Mottled	900	SF

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

### 3.1 Conclusions

Nova conducted an asbestos survey and assessment of the Grede Foundries, Inc. Reedsburg Foundry facility located at 700 Ash Street in Reedsburg Wisconsin on March 21-22, 2000. Laboratory analysis of 42 bulk samples detected asbestos (includes presumed/assumed positive materials) in the following materials:

Material Identification Number	Material Identification	Material Subcategory	Material Subcategory Description	Sum Of Quantity		Unit
214	4-8 Felt Pipe	FP1	6" Wrapped	100	,	LF
	Insulation		Pipe Insulation			
310	12x12 Floor	FT1	Tan Mottled	250		SF
	Tile & Mastic					
310	12x12 Floor	FT2	White Floor	900		SF
	Tile & Mastic		Tile			
324	Transite Pipe	TR1	Exhaust Pipe	40		SF
324	Transite Siding	TR2	Exterior Siding	800		SF
406	Roofing	RI1	Fibrous Roof	4,000		SF
	Insulation		Insulation	######################################		
			<b>Under Decking</b>			

A total of approximately 100 linear feet of friable asbestos-containing pipe-insulation and associated pipe-fittings, 4,000 square feet of friable asbestos-containing roof insulation; 1,150 square feet of non-friable asbestos-containing 12" X 12" floor tile and associated mastic; 40 square feet of non-friable transite exhaust pipe; and 800 square feet of non-friable asbestos-containing transite siding was identified during the survey.

Nova did not inspect any areas of the building that were not readily accessible without intrusive or destructive sampling techniques, such as within or behind walls. Any areas of the building not accessible for inspection during the survey should be assumed to contain asbestos until tested and proven otherwise.

### 3.2 Recommendations

Based on the results of this investigation, Nova recommends the following:

- The facility owners should notify employees, tenants, contractors, and vendors working in the building of the presence, quantity, and location of identified or assumed ACBM.
- Approximately 100 linear feet of friable asbestos-containing pipe-insulation and associated pipe-fittings were identified beneath a stairwell adjacent to the main office area. In addition, approximately 4,000 square feet of friable asbestos-containing roof insulation was identified beneath the corrugated roof decking adjacent to a second floor storage room; 1,150 square feet of non-friable asbestos-containing 12" X 12" floor tile and associated mastic was identified in the Plant 5 Maintenance offices and storage areas; approximately 40 square feet of non-friable transite exhaust pipe was identified in the storage room above the main locker room area; and approximately 800 square feet of non-friable asbestos-containing transite siding was identified at the north storage building. The pipe insulation and associated fittings were damaged and in poor condition during the time of the survey and were given an AHERA Hazard Ranking of 2. A Hazard Ranking of 2 is defined as ACBM that is damaged and is located in areas where disruption could be expected due to work being performed in the area and/or dispersed in moving air. The roof insulation was not damaged and in good condition during the time of the survey and was given an AHERA Hazard Ranking of 6. A Hazard Ranking of 6 is defined as friable ACBM that is in good condition, but has potential for damage. Hazard Rankings are not required for non-friable materials (i.e. vinyl floor tile, mastic, transite) and are therefore not provided as part of this report.
- According to the EPA Decision Tree, continue Operations and Maintenance (O&M) and repair
  or remove damaged areas as soon as possible. Short-term corrective action may include
  reducing potential for damage, encapsulating damaged sections and/or restricting access to the
  area.
- All friable ACBM, damaged non-friable ACBM, and all non-friable ACBM, which may become friable during renovation or demolition, should be removed from the affected areas of the building prior to these activities.
- The owners should submit completed Notifications of Intent to Perform Asbestos Abatement or Demolition/Renovation forms to the appropriate regulatory agencies.

- Any areas of the building not inspected during this investigation should be assumed to contain asbestos. Prior to any renovation, demolition, or disturbance of potential ACBM, selective demolition with appropriate controls are recommended until the asbestos content of the potentially impacted materials can be confirmed.
- The owner should maintain an Operations and Maintenance (O&M) Program for ACBM remaining in the facility.

### 4.0 STANDARD OF CARE

The services performed by Nova Consulting Group, Inc. (Nova) on this project have been conducted with that level of care of skill ordinarily exercised by reputable members of the profession, practicing in the same locality under similar budget and time constraints. No other warranty is expressed or implied.

Prepared By:



Project Manager



Group Manager

5.0 TABLE 1, TABLE 2, DRAWINGS

### TABLE 1

### MATERIAL IDENTIFICATION INVENTORY

## Nova Consulting Group, Inc. 1107 Hazeltine Boulevard, Suite #400 Chaska, MN 55318

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Table 1: Material Identification Inventory

Project Number: C00-0065

Login Number: Client Number:

**Building Number:** DAVIS 005

> **Building Name:** Client Name: Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** Reedsburg, WI 53959 700 Ash Street

Survey Date: March (21,22), 2000

Area:	<b>Lunch Room</b>					Dhysical			
Location	Material Id#	Material Id# Material Identification	Msti	Met'i Asbestos		Assess.	Potential	Cond ANED	Milita
Room Number	Subcategory	Subcategory Subcategory Description	Code	Code Content	Oty Unit	Fri Cond	Water Air VIb Acc Rating	cc Rating	C
2nd Floor	310	12x12 Floor Tile & Mastic	X	N N	300 SF			٥	× ×
2070	FT3	Grey Mottled							
2nd Floor	310	12x12 Floor Tile & Mastic	X	N	300 SF			0	Z
2070	FT3	Grey Mottled							
2nd Floor	310	12x12 Floor Tile & Mastic	X	N N	300 SF			0	NA
2070	FI3	Grey Mottled							



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# Table 1: Material Identification Inventory

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Project Number: C00-0065

Client Number: DAVIS 005

Login Number: 23821

**Building Number:** 

**Building Name:** Client Name: Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** 700 Ash Street

Survey Date: March (21,22), 2000 Reedsburg, WI 53959

Area:	Main Office					Physical			
Location	Material Id#	Material kd# Material Identification	Mat'i Asbestos	Asbestos		Assess.	Potential		<b>≥</b>
Room Number	Subcategory	Subcategory Subcategory Description	Code Content	Content	Oty Unit	Fri Cond	Dity Unit Fri Cond Water Air Vib Acc Rating Cat.	Acc Rating Cat.	_ 2
North Side of Plant	305	Sheetrock & Taping Compound	X	UN	20000 SF			0	- 1
Closet	DW1	Drywall Taping Compound							



Nova Consulting Group, Inc. Chaska, MN 55318 1107 Hazeltine Boulevard, Suite #400

# Table 1: Material Identification Inventory

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Client Number: Project Number: DAVIS 005 C00-0065

Login Number:

**Building Number:** 

**Building Name:** Client Name: Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** 700 Ash Street Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area: Mecr	Mechanical Room	_				!						
Location	Material Ide	Material Identification	Ę	Ashaetna		2 3	Physical Assess.		Damage	2		
Room Number	Subcategory	Subcategory Subcategory Description	Code	Content	Oity Unit	I	S	Water Air Vib	4		Pating.	Cat
Above Main Locker Room	241	Tank Insulation	Т	¥	100 SF		1	I	l			
Boiler Room	111	Spray-On Tank Insulation		10 m	;							2
Above Main Locker Room	241	Tank Insulation	T	N N	100SF							2
Boiler Room	111	Spray-On Tank Insulation									-	NA
Above Main Locker Room	241	Tank Insulation	Т	N N	100 SF							2
Boiler Room	111	Spray-On Tank Insulation									•	25
Above Main Locker Room	306	Plaster	Z	ND	100 SF							2
Boiler Room	PL.1	Wall Plaster										3
Above Main Locker Room	306	Plaster	Z	N N	100 SF						٥	Z
Boiler Room	PLI	Wall Plaster										;
Above Main Locker Room	306	Plaster	Z	N N	100 SF						•	Z
Boiler Room	PL1	Wall Plaster									c	25
Above Main Locker Room	305	Sheetrock & Taping Compound	Z	N N	20000 SF							Z
Storage	DW1	<b>Drywall Taping Compound</b>										
Above Main Locker Room	406	Roofing Insulation	Z	YES	4000 SF	F	z	×	-		3	
Storage	RII	Fibrous Roof Insulation Under Decking										
Above Main Locker Room	406	Roofing Insulation	Z	YES	4000 SF	F	z	Z	-		3	,
Storage	RII	Fibrous Roof Insulation Under Decking						-	)			
Above Main Locker Room	406	Roofing Insulation	Z	YES	4000 SF	Ŧ	z	×			L 2	2
Storage	RII	Fibrous Roof Insulation Under Decking										81



1107 Hazeltine Boulevard, Suite #400 Nova Consulting Group, Inc.

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Chaska. MN 55318

Table 1: Material Identification Inventory

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**Building Name:** Client Name: **Grede Reedsburg Foundry** Davis and Kuelthau

**Building Address:** 700 Ash Street Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area: Mechanical Space

Building Number: Login Number: Client Number: Project Number:

> DAVIS 005 C00-0065

Storage Assumed Above Main Locker Room Room Number Location Subcategory Subcategory Description Material Id# Material Identification TRI 324 Transite 16" Transite Exhaust Pipe Code | Content Mat'l Asbestos Z City Unit 40 SF 3 Z A88088. Physical Cond Z Г

> Potentia Damage

Acc Rating

Cond. AHERA

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# **Table 1: Material Identification Inventory**

Project Number: C00-0065

Client Number:

**Building Number:** Login Number:

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23821

**Building Name:** Client Name: Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** Reedsburg, WI 53959 700 Ash Street

Survey Date: March (21,22), 2000

Area:	Men's Locker/ Bath Room	th Room				₽	vaica		3				
Location	Material id#	Material id# Material identification	Mo:	Met'l Asbestos		≥:	Assess.		Potenti	Potential		Cond AMERA	AHERA
Room Number	Subcategory	Subcategory Subcategory Description	Code	Code Content	Oty Unit	3	Cond Water Air VIb Acc Rating	Water	₹	¥	<b>&amp;</b>	Rating	Cat
2nd Floor	303	2x4 Ceiling Tile	Z	ND	1000 SF	İ		1	- 1	1		٥	×
2070	CT3	Off-White With Fissures And Pinholes											
2nd Floor	303	2x4 Ceiling Tile	Z	N N	1000 SF							0	N
2070	CT3	Off-White With Fissures And Pinholes											
2nd Floor	303	2x4 Ceiling Tile	Z	N N	1000 SF							0	Z
2070	CT3	Off-White With Fissures And Pinholes											

### Nova Consulting Group, Inc. 1107 Hazeltine Boulevard, Suite #400 Chaska. MN 55318

Table 1: Material Identification Inventory

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Project Number: DAVIS 005 C00-0065

Client Number:

Login Number: 23821

> **Building Name:** Client Name: **Grede Reedsburg Foundry** Davis and Kuelthau

**Building Address:** 700 Ash Street

Area: Men's Rest Room		<b>Building Number:</b>
st Room	Survey Date:	Reedsburg, WI
	March (21,22), 2000	Reedsburg, WI 53959

Location	Men	Men S Hest Hoom	Material Id#   Material Identification	<u> </u>	Ashania		Physical Assess.	Damage		
Room Number	nber	Subcategory	Subcategory Subcategory Description	Code	Code Content	Oty Unit	ō.		cond. Anend	C 27
1st Floor Un	Ist Floor Under Locker Room	222	0-4 Fibrous Pipe Fittings	-T	ğ	60 EA			0	z
2070	Above Ceiling	FF2	2" Mudded Fittings On Rest Room Lines						4	į
1st Floor Un	1st Floor Under Locker Room	222	0-4 Fibrous Pipe Fittings	Т	¥	60 EA			0	Z
2070	Above Ceiling	FF22	2" Mudded Fittings On Rest Room Lines							
Main Locker Main Offices	Main Locker Room Behing Main Offices	222	0-4 Fibrous Pipe Fittings	T	N)	60 EA			0	NA
Rest Room	Rest Room Above Ceiling	FF2	2" Mudded Fittings On Rest Room Lines							

Nova Consulting Group, Inc. Chaska, MN 55318 1107 Hazeltine Boulevard, Suite #400

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# Table 1: Material Identification Inventory

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Client Number: Project Number: DAVIS 005 C00-0065

Login Number:

**Building Number:** 

Client Name: **Building Name:** Davis and Kuelthau

700 Ash Street **Grede Reedsburg Foundry** 

**Building Address:** Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area:	Out Building				9	5						
Location	Material ki#	Material Id# Material Identification	Mat'l Asbestos		<u>ک</u>	909.		Pote	1	_	1	
Room Number	Subcategory	Subcategory Description	Code Content	City Unit	3	<b>Dec</b>	Water	2	¥	ğ		Car
North of Plant	324	Transite	X	800 SF	z	z	Z	-	-	-	-	z I
	TR2	Transite Siding								ļ		
Assumed												



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Project Number: C00-0065

Client Number:

DAVIS 005

**Building Number:** Login Number: 23821

> Client Name: **Building Name: Grede Reedsburg Foundry** Davis and Kuelthau

Table 1: Material Identification Inventory

**Building Address:** 700 Ash Street

Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area:	Plant 5 Clean					Physical		).		
Location	Material	Material Id# Material Identification		Mat'i Asbestos		Assess.	Potential		Cond AMERA	
Room Number	Subcates	Subcategory Subcategory Description	Code	Code Content	Oty Unit	Fri Cond	Water	Acc Pa	sting Cat.	i i
Center of Plant	101	Spray-On	s	N.	600 SF					×
Above Locker	801	Spray-On Soundproofing								
Center of Plant	101	Spray-On	S	3	600 SF				0	N
Above Locker	SO1	Spray-On Soundproofing								
Center of Plant	222	0-4 Fibrous Pipe Fittings	T	N	30 EA				0	Z
Outside Locker Area	FFI	Fibrous Fittings On Fiberglass Insulaiton								



### 1107 Hazeltine Boulevard, Suite #400 Nova Consulting Group, Inc. Chaska, MN 55318

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Table 1: Material Identification Inventory

Project Number: C00-0065

Client Number:

**Building Number:** Login Number: 23821 DAVIS 005

> Client Name: **Building Name:** Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** 700 Ash Street Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area:	Plant 5 Maintenance	100				?			•				STATE OF STA
	Material Ide	Material Identification	Mati	Asbestos		23	A3966.		Damage Potential	£ 6	_	Cond	AHERA
HOORING HIGGS	Subcategory	Subcategory Subcategory Description	Code	Content	Oty Unit	Fi	Cond	Water Air VIb Acc	All	VIIb /	CC FI	Rating	Cast
Maintenance Office	305	Sheetrock & Taping Compound	Z	ND	20000 SF							0	×
Office	DWI	Drywall Taping Compound											
Plant Offices	303	2x4 Ceiling Tile	Z	N N	900 SF							0	Z
Office	CT2	White With Fissures											
Plant Offices	303	2x4 Ceiling Tile	Z	Ą	900 SF							0	Z
Office	CT2	White With Fissures											
Plant Offices	310	12x12 Floor Tile & Mastic	Z	YES	300 SF	z	z	-	-	-	Z	-	X
Office	FT2	White Floor Tile											
Plant Offices	310	12x12 Floor Tile & Mastic	Z	YES	300 SF	z	z	-		-	Z	-	X
Stairwell	FT2	White Floor Tile											
Plant Offices	310	12x12 Floor Tile & Mastic	Z	YES	300 SF	z	z	-	-		Z	-	NA
Tool Area	FT2	White Floor Tile											
SW Area	101	Spray-On	s	¥	500 SF							0	×
Maintenance	SO1	Spray-On Soundproofing											
SW Area	222	0-4 Fibrous Pipe Fittings	7	N N	30 EA							0	Z
Maintenance	<b>H</b>	Fibrous Fittings On Fiberglass Insulaiton											
SW Area	222	0-4 Fibrous Pipe Fittings	Т	N	30 EA							0	N
Maintenance		Fibrous Fittings On Fiberglass Insulation											
Upper Level Office	303	2x4 Ceiling Tile	Z	N	250 SF							0	Z
Training	CTI	Off-White Fissured											
MOOIII													

## Nova Consulting Group, Inc. 1107 Hazeltine Boulevard, Sulte #400 Chaska. MN 55318

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Table 1: Material Identification Inventory

Client Number: Project Number: DAVIS 005 C00-0065

Login Number: 23821

**Building Number:** 

**Building Name:** Client Name:

**Building Address:** 700 Ash Street **Grede Reedsburg Foundry** 

Davis and Kuelthau

Survey Date: Reedsburg, WI 53959 March (21,22), 2000

Агеа:	Plant 5 Maintenance	100				7			'				
Location	Material Id#	Material Id# Material Identification	K	Ashestos		<b>≥</b> :	Assess.		Potentis	Potential	_	ĺ	
Room Number	Subcategory	Subcategory Subcategory Description	Code	Content	Oily Unit	3	Cond	¥ R	Water Air Vib		Acc Reth	Reting	Cat
Upper Level Office	303	2x4 Ceiling Tile	Z	ĕ	250 SF	I		I				ء	Z
Training Room	CTI	Off-White Fissured										•	
Upper Level Office	303	2x4 Ceiting Tile	Z	N N	250 SF							0	Z
Training Room	CTI	Off-White Fissured										j	;
Upper Level Office	310	12x12 Floor Tile & Mastic	Z	YES	250 SF	z	z	-	-	-	3	-	N N
Training Room	FT1	Tan Mottled									<u>1</u>	1	,
Upper Level Office	310	12x12 Floor Tile & Mastic	Z	YES	250 SF	z	z	-	-	-	3	-	Z .
Training Room	FTI	Tan Mottled								1		,	;
Upper Level Office	310	12x12 Floor Tile & Mastic	Z	YES	250 SF	z	z			-	2	-	Z
Training Room	FTI	Tan Mottled					9				1	ě	
Upper Level Plant Offices	offices 303	2x4 Ceiling Tile	×	ND N	900 SF							0	N
Office	CT2	White With Fissures				10							



### Nova Conduiting Group, Inc. 1107 Hazeitine Boulevard, Suite #400 Chaska, MN 55318

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Table 1: Material Identification Inventory

Project Number: C00-0065

Client Number: DAVIS 005 Login Number: 23821

**Building Number:** 

Client Name: Davis and Kuelthau

Building Name: Grede Reedsburg Foundry

Building Address: 700 Ash Street
Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Area: Pla	Plant Office					<u> </u>	Dhysical						
Location	Material Id#	Material Id# Material Identification	A S	Mat'i Asbestos		<b>8</b> :	150000.		Pote		_	ĺ	АМЕВА
Room Number	Subcategory	Subcategory Subcategory Description	Code	Code Content	Oty Unit	3	Cond	Made	2	¥	<b>∂</b> <b>3</b> (	eding.	Cat
Behind Main Offices	214	4-8 Felt Pipe Insulation	T	YES	100LF	F	SD	₌ Ì	-	-	z	4	_
Under Stairwell	판	6" Wrapped Pipe Insulation									,	į	,
Behind Main Offices	214	4-8 Felt Pipe Insulation	7	YES	100LF	Ŧ	S S	H	-	-	Z	4	_
Under	FP1	6" Wrapped Pipe Insulation								1	j	i	
Behind Main Offices	214	4-8 Felt Pipe Insulation	Т	YES	100LF	Ŧ	Se l	#	-	-	Z	4	_
Under Stairwell	FP1	6" Wrapped Pipe Insulation							1		:	9.5	31



### 1107 Hazeltine Boulevard, Suite #400 Chaska, MN 55318 Nova Consulting Group, Inc.

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Table 2: Bulk Sample Analysis

Project Number: C00-0065

Client Number: Login Number: DAVIS 005

> **Building Name:** Client Name: **Grede Reedsburg Foundry** Davis and Kuelthau

**Building Number:** 

**Building Address:** 700 Ash Street Reedsburg, WI 53959

Survey Date: March (21,22), 2000

Project Manager:

Sampled By:

Survey Date(s): March (21,22), 2000

Analytical Method: Polarized Light Microscopy with Dispersion Staining (EPA/600/R-63/116, July 1993)

Logged in By:

Analyzed By: Client Notified By

Received/Lab By:

Data/Time: 3/24/2000

Total # Samples: 42 Container Type:

Whirlpak

Data/Time: 4/3/2000 Date/Time: 4/5/2000

Date/Time:

Note

Turnaround Time: Relinquished By: Received By:

Due:

Date/Time: Date/Time: Date/Time: 3/21/2000

Mtt ID#-Sub-Ltr Sample Position	#-Sub le Pos	-Ltr	Area Location / Room#	Area Location / Room# Material Description	Subcategory Description	Asbestos Fiber	Non-Asbestos Fibers	Comments/ Nonfibrous Material
101 -	101 - SO1 -A	Α.	Plant 5 Maintenance SW Area / Maintenance	Spray-On	Spray-On Soundproofing	ND	95% Cellulose	5% Other
101	SOI	-В	Plant 5 Clean Center of Plant / Above Locker	Spray-On	Spray-On Soundproofing	N	95% Cellulose	5% Other
101 -	SO1	·c	Plant 5 Clean Center of Plant / Above Locker	Spray-On	Spray-On Soundproofing	ND	95% Cellukse	5% Other
214 -	72	. A	Plant Office Behind Main Offices / Under Stairwell	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	ND	95% Cellulose	5% Other Brown Fibrous
214 -	FP1	۸-	Plant Office Behind Main Offices / Under Stairwell	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	15% Chrysotile	50% Cellulose	35% Other Tan Fibrous
214 -	791	-в	Plant Office Behind Main Offices / Under Stairwell	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	ND	95% Cellulose	5% Other Brown Fibrous
214 -	FP1	-в	Plant Office Behind Main Offices / Under Stairwell	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	15% Chrysotile	50% Cellulose	35% Other Tan Fibrous

Nova Consulting Group, Inc. 1107 Hazeltine Boulevard, Suite #400

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Chaska, MN 55318

# Table 2: Bulk Sample Analysis

Client Number: Project Number: DAVIS 005 C00-0065

**Building Number:** Login Number:

> **Building Address: Building Name:** Client Name:

Grede Reedsburg Foundry Davis and Kuelthau

700 Ash Street

Reedsburg, WI 53959 March (21,22), 2000

Survey Date:

Mtl ID#-Sub-Ltr Sample Position	Mti iD#-Sub-Ltr Sample Positio	Sition P.Ltr	Area Location / Room#	Material Description	Subcategory Description	Asbestos Fiber	Non-Asbestos Fibers	Comments/ Nonfibrous Material
214 - FPI -C	FP1	ċ	Plant Office Behind Main Offices / Under Stairwell	4-8 Felt Pipe Insulation	6" Wrapped Pipe Insulation	ND	95% Cellulose	5% Other
214 -	FP1	-c	Plant Office Behind Main Offices / Under Stairwell	4-8 Fek Pipe Insulation	6" Wrapped Pipe Insulation	20% Chrysotile	50% Cellulose	30% Other Tan Fibrous
222 -	I.E.	ż	Plant 5 Maintenance SW Area / Maintenance	0-4 Fibrous Pipe Fittings	Fibrous Fittings On Fiberglass Insulation	Ą	5% Cellulose	80% Other
222 -	Ŧ	В-В	Plant 5 Maintenance SW Area / Maintenance	0-4 Fibrous Pipe Fittings	Fibrous Fittings On Fiberglass Insulation	¥	15% Fibrous Glass	85% Other
222 -	Æ	ċ	Plant 5 Clean Center of Plant / Outside Locker Area	0-4 Fibrous Pipe Fittings	Fibrous Fittings On Fiberglass Insulaiton	ND	15% Fibrous Glass	85% Other
222 -	FF2	Α.	Men's Rest Room 1st Floor Under Locker Room / 2070	0-4 Fibrous Pipe Fittings	2" Mudded Fittings On Rest Room Lines	Ą	10% Cellulose 15% Fibrous Glass	75% Other
222 -	FF2	·B	Men's Rest Room 1st Floor Under Locker Room / 2070	0-4 Fibrous Pipe Fittings	2" Mudded Fittings On Rest Room Lines	ND N	10% Cellulose 15% Fibrous Glass	75% Other
222 -	FF2	Ģ	Men's Rest Room Main Locker Room Behing Main Offices / Rest Room	0-4 Fibrous Pipe Fittings	2" Mudded Fittings On Rest Room Lines	ND	10% Cellulose 15% Fibrous Glass	75% Other
241 -	12	÷	Mechanical Room Above Main Locker Room / Boiler Room	Tank Insulation	Spray-On Tank Insulation	N.	95% Cellulose	5% Other
241 -	目	-B	Mechanical Room Above Main Locker Room / Boiler Room	Tank Insulation	Spray-On Tank Insulation	Ą	95% Cellulose	5% Other



Nova Consulting Group, Inc. Chaska. MN 55318 1107 Hazeltine Boulevard, Suite #400

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# Table 2: Bulk Sample Analysis

Project Number: C00-0065

**Building Number:** Login Number: Client Number: DAVIS 005

> **Building Name:** Client Name:

**Building Address:** Grede Reedsburg Foundry 700 Ash Street Davis and Kuelthau

Reedsburg, WI 53959

Mtl ID#-Sub-Ltr Area Sample Position Locatic	
Area Location / Room#	
Material Description	Survey Date:
Subcetenory Description	March (21,22), 2000
Asharina Elbar	
Non-Asbestos	
Commen	

Sample Position	e Pos	tion	Area Location / Room#	Material Description	Subcategory Description	Asbestos Fiber	Non-Asbestos Fibers	Comments/ Nonfibrous Material
241 -	Ш	-Ċ	Mechanical Room Above Main Locker Room / Boiler Room	Tank Insulation	Spray-On Tank Insulation	ND	95% Cellulose	5% Other
303 -	CII	ż	Plant 5 Maintenance Upper Level Office / Training Room	2x4 Ceiting Tile	Off-White Fissured	N	60% Cellulose 10% Fibrous Glass	30% Other
303 -	CTI	Ė	Plant 5 Maintenance Upper Level Office / Training Room	2x4 Ceiling Tile	Off-White Fissured	N	60% Cellulose 10% Fibrous Glass	30% Other
303 -	CII	ċ	Plant 5 Maintenance Upper Level Office / Training Room	2x4 Ceiling Tile	Off-White Fissured	Ŋ	60% Cellulose 10% Fibrous Glass	30% Other
303 -	CH2	-A	Plant 5 Maintenance Plant Offices / Office	2x4 Ceiling Tile	White With Fissures	N	60% Cellulose 10% Fibrous Glass	30% Other
303 -	CES	ъ	Plant 5 Maintenance Plant Offices / Office	2x4 Ceiling Tile	White With Fissures	ND N	60% Cellulose	30% Other
303 -	CIB	-c	Plant 5 Maintenance Upper Level Plant Offices / Office	2x4 Ceiling Tile	White With Fissures	ND	60% Cellulose 10% Fibrous Glass	30% Other
303 -	3	ż	Men's Locker/ Bath Room 2nd Floor / 2070	2x4 Ceiling Tile	Off-White With Fissures And Pinholes	N	50% Cellulose 20% Fibrous Glass	30% Other
303 -	CT3	늉	Men's Locker/ Bath Room 2nd Floor / 2070	2x4 Ceiling Tile	Off-White With Fissures And Pinholes	ND	50% Cellulose 20% Fibrous Glass	30% Other
303 -	CT3	ç	Men's Locker/ Bath Room 2nd Floor / 2070	2x4 Ceiling Tile	Off-White With Fissures And Pinholes	ND	50% Cellulose 20% Fibrous Glass	30% Other
305 -	DW1	, ×	Mechanical Room Above Main Locker Room / Storage	Sheetrock & Taping Compound	Drywall/ Taping Compound	ND		100% Other Taping Compound Layer

Nova Constiting Group, Inc. 1107 Hazeltine Boulevard, Suite #400 Chaska. MN 55318

# Table 2: Bulk Sample Analysis

Project Number: C00-0065
Client Number: DAVIS 005

Client Number: DAVIS 005
Login Number: 23821
Building Number:

Client Name: Davis and Kuelthau
Building Name: Grede Reedsburg Foundry
Building Address: 700 Ash Street

Reedsburg, WI 53959

March (21,22), 2000

Survey Date:

Mti ID#-Sub-Ltr Sample Position	.tr Area ion Location / Room#	Material Description	Subcatagory Description	Ashasha Elhar	Non-Asbestos	Comments/ Nonfibrous Material
305 - DW1 -A	- A Mechanical Room Above Main Locker Room / Storage	ound	Drywall/ Taping Compound	ND	10% Cellulose 3% Fibrous Glass	87% Other Sheetrock Layer
305 - DW1 -	-B Plant 5 Maintenance Maintenance Office / Office	Sheetrock & Taping Compound Drywall Taping Compound	Drywall Taping Compound	ND	5% Cellulose 3% Fibrous Glass	92% Other Sheetrock Layer
305 - DW1 -	-C Main Office North Side of Plant / Closet	Sheetrock & Taping Compound	Drywall Taping Compound	N	10% Cellulose 3% Fibrous Glass	87% Other Sheetrock Layer
306 - PLI -	- A Mechanical Room Above Main Locker Room / Boiler Room	Plaster	Wall Plaster	ND		100% Other
306 - PL1 -	-B Mechanical Room Above Main Locker Room / Boiler Room	Plaster	Wall Plaster	Ŋ		100% Other
306 · PL1 ·	-C Mechanical Room Above Main Locker Room / Boiler Room	Plaster	Wall Plaster	Ŋ		100% Other
E		12x12 Floor Tile & Mastic	Tan Mottled	3% Chrysotile		97% Other Floor Tile No Mastic
310 - FT1 .	-B Plant 5 Maintenance Upper Level Office / Training Room	12x12 Floor Tile & Mastic	Tan Mottled	3% Chrysotile		97% Other Floor Tile
310 - FT1 .	-B Plant 5 Maintenance Upper Level Office / Training Room	12x12 Floor Tile & Mastic	Tan Mottled	ND Mastic		100% Other Clear Mastic
310 · FT1 ·	-C Plant 5 Maintenance Upper Level Office / Training Room	12x12 Floor Tile & Mastic	Tan Mottled	3% Chrysotile		97% Other Floor Tile



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# Table 2: Bulk Sample Analysis

Project Number: DAVIS 005 C00-0065

Login Number: Client Number:

**Building Number:** 23821

> **Building Name:** Client Name: Grede Reedsburg Foundry Davis and Kuelthau

**Building Address:** Reedsburg, WI 53959 700 Ash Street

Survey Date: March (21,22), 2000

Mtl ID#-Sub-Ltr	Area				Non-Ashestos	Comments
Sample Position	Location / Room#	Material Description	Subcategory Description	Asbestos Fiber	•	Nonfibrous Material
406 - RII -B	Mechanical Room	Roofing Insulation	Eibraus Boof Incolories III-1	360 01		
M1 - 1	Above Main Locker Room / Storage	Rooting insulation	Fibrous Roof Insulation Under Decking	35% Chrysotile	15% Fibrous Glass	50% Other
406 - RII -C	Mechanical Room Above Main Locker Room / Storage	Roofing Insulation	Fibrous Roof Insulation Under Decking	25% Chrysotile	15% Fibrous Glass	60% Other

